

PROCEEDINGS
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A NEW GENUS OF DIGGER WASPS FROM SOUTH
AMERICA (HYMENOPTERA: SPHECIDAE)

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While identifying the Sphecinae in the collection of the Museum of Comparative Zoology, Harvard University, specimens of a wasp generally known as *Chlorion cyaniventris* (Guérin) were examined. This study has revealed that *cyaniventris* possesses features not found in *Chlorion* or any other sphecine genus, and therefore the following new genus is proposed for Guérin's species.

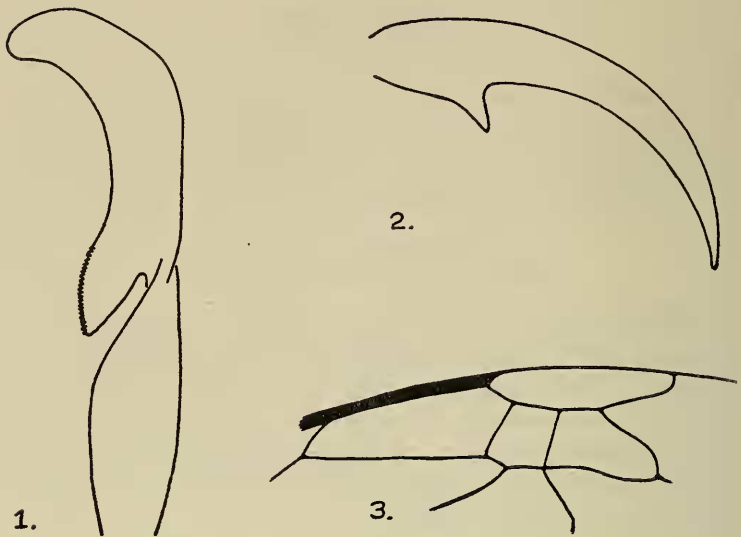
Stangeella, new genus

Description: Mouthparts short, third maxillary palpomere symmetrical; female mandible with two mesal teeth on inner margin; flagellomere I one and one-half times length of II in female, subequal to II in male; male antenna with fossulae; female clypeus produced, free margin sinuate; male clypeus produced, truncate at apex; second submarginal cell of forewing slightly higher than wide, receiving the first recurrent vein, second recurrent vein interstitial with submarginal II and III (Fig. 3); propodeum with stigmatal groove; petiole slightly longer than hind coxa; male sternites IV-VII with velvety pubescence; pygostyles present in male; female with a psammophore; tarsal claws with a single basal tooth on inner margin (Fig. 2); intersegmental membrane of tarsomeres with oval pads ventrally; blade-like terminal setae of last tarsomere separated by more than twice a setal breadth.

Type of genus: *Pelopoëus cyaniventris* Guérin, 1831.

Etymology: *Stangeella* is named in honor of Lionel A. Stange.

Discussion: This monotypic genus does not fit conveniently into any of the the three tribes of the Sphecinae. Tarsal characters and the general form of the body eliminate placement of *Stangeella* in the Amophilini. A strong relationship to the Sceliphronini is suggested by the short mouthparts, the single claw tooth, the presence of pads on the intersegmental membrane of the tarsus, and the narrow blade-like setae of the last tarsomere. However, in the Sceliphronini the claw tooth is mesal, not basal as in *Stangeella*. The basal tooth suggests a relation to the Sphecini but in this tribe there are always two or more teeth and



FIGS. 1-3. *Stangeella cyaniventris*. FIG. 1—Apical half of dissected aedeagus. FIG. 2—Tarsal claw. FIG. 3—Portion of forewing showing submarginal cells and recurrent veins.

tarsal pads are unknown. It would appear that *Stangeella* is intermediate between the Sceliphronini and the Sphecini, and the final disposition of the genus will have to await the conclusion of a world-wide generic and tribal study of the Sphecinae being carried out at present by R. M. Bohart, University of California, Davis, and the author.

Stangeella cyaniventris (Guérin)

Pelopoeus cyaniventris Guérin, 1831. In Duperry, Voyage autour du Monde, . . . La Coquille, Zoology, 2 (part 2, div. 1): 263, Atlas volume (1826), pl. 8, fig. 15.

Male: Average length 20 mm; head, thorax, and petiole black, gaster metallic blue; wings evenly dark violaceous; erect hair of body black; face and tegula with appressed silver pubescence; flagellomeres II-VI with broad fossulae; thorax everywhere densely punctate, coxa, and the femora to a less extent, coarsely punctate; genitalia as in Fig. 1.

Female: Average length 22 mm; essentially as in male.

Taxonomy: In his original description, Guérin gave the length of the body as 30 and the wingspread as 45 mm. These figures are certainly in error since the measurements taken from the atlas figure are 22.5 and 35 mm, respectively. The location of Guérin's type material is unknown

but presumably is in Genoa or Paris. His figure of the wasp and the description of the wing venation positively identify the species.

Biology: According to Willink (1951), who quotes Claude-Joseph, these wasps are solitary ground-nesters and dig a single-celled nest. Prey consists of Mantidae (*Mantis crenaticollis*) and possibly Proscopidae. The mantids are carried to the prepared nest on the wing. Among all the genera of Sphecinae, *Stangeella* is unique in provisioning with Mantidae.

Distribution: I have seen examples from Chile and Argentina, and Guérin gave Brazil as the type locality in his original description.

LITERATURE CITED

- Guérin-Méneville, F. C. 1831. Insects *in* Duperry, Voyage autour du Monde, sur la Corvette de la Majeste, La Coquille, pendant les années 1822, 1823, 1824, 1825. Zoology, by M. Lesson, vol. 2 (part 2, div. 1): 57-319. (Atlas volume of plates bears date 1826, but supposedly published 1838.)
- Willink, A. 1951. Las especies Argentinas y Chilenas de Chlorionini. Acta Zool. Lilloana 11: 53-225.